near the anterior side at about two-fifths the length of the back; they are small, slightly prominent, and calyciform: *lunule* indistinct: *ligament* narrow, yellowish brown, altogether external and placed between the "nymphæ," or pouting edges of the shell, on the posterior side: *cartilage* minute, oblong, contained in a narrow depression immediately underneath the beaks: *hinge-line* obtuse-angled: *hinge-plate* rather narrow: *teeth* small, erect, and pointed, 12 on the anterior side and 20 on the posterior side, the middle of the hinge-plate forming the cartilage-pit: *inside* polished; edge plain: *muscular* and *pallial scars* large and conspicuous. L. 0·2. B. 0·35.

Station 9, at the entrance of Davis Strait, 1750 fms.; Station 12, in the North Atlantic, 1450 fms. 'Porcupine' Exp., 1869, off the north-western coast of Ireland, 1215–1443 fms.; 1870, Bay of Biscay, 718–1095 fms., and Mediterranean, 1415 fms. Norwegian Exp., 1876, 1800 fms.

May be easily known from *M. obtusa*, Sars, by its very different shape.

XLIII.—*Description of a new Species of* Macrotus.

By G. E. Dobson, M.A., M.B., F.L.S., &c.

Macrotus bocourtianus, n. sp.

Ears as long as the head: front margin of the nose-leaf scarcely defined, continuous with the upper lip; terminal leaf narrow and subacutely pointed: last caudal vertebra and half the antepenultimate vertebra free; the free portion of the tail nearly equal to the thumb in length.

Teeth as in *M. waterhousii*. Fur dark brown above, paler beneath.

Length (of a specimen not quite full-grown)—head and body 2·15 inches; tail 1·35, tail free from membrane 0·4; head 1·0; ear 1·0; tragus 0·4; nose-leaf 0·3; forearm 2·05; thumb 0·5; second finger—metacarp. 1·5, first phalanx 0·68, second phalanx 0·7, third phalanx 0·6; third finger—metacarp. 1·4, first phalanx 0·65, second phalanx 0·55; fourth finger—metacarp. 1·6, first phalanx 0·6, second phalanx 0·45; tibia 0·85; calcaneum 0·35; foot and claws 0·45.

The above description has been taken from the largest of four specimens preserved in the Paris Museum, obtained by M. Bocourt in Vera Paz, Guatemala, which, through the kindness of M. Alph. Milne-Edwards, I have been enabled to examine and describe. All the specimens agree in the remarkable length of the projecting portion of the tail, and in other characters described above.

In *M. waterhousii* the ears are longer than the head, the front margin of the nose-leaf is thickened and raised above the muzzle, and the extremity of the terminal nose-leaf obtuse: the last caudal vertebra is alone free; and its joint is completely enveloped in the interfemoral membrane.

Both *M. californicus*, Baird, and *M. mexicanus*, Saussure (evidently synonyms of *M. waterhousii*), are described as having the last caudal vertebra alone free; and in Mr. Allen's description* of *M. californicus* the length of the free portion of the tail is given as 0·2 inch. I have examined many specimens of *M. waterhousii* of different ages; and in all I have found the last caudal vertebra alone free.

Although the specimens in the Paris Museum are not full-grown, as the extremities of the finger-bones show, yet the metacarpal and phalangeal bones are as long as those of perfectly adult specimens of *M. waterhousii*. It follows, therefore, that this species is larger than *M. waterhousii*.

MISCELLANEOUS.

Researches on the Phenomena of Digestion and on the Structure of the Digestive Apparatus in the Belgian Myriopods. By Félix Plateau. (Abstract by the Author.)

This work is the natural sequence of my "Recherches sur les phénomènes de la Digestion chez les Insectes"†. Like this, it contains a large number of experiments; only, the digestive tube of the Myriopods being very imperfectly known, I have been obliged, beside the physiological part, to give considerable space to purely anatomical observations.

The group which has offered most new anatomical facts is the genus *Cryptops*. These animals are distinguished by an extremely ample buccal intestine, playing the part of the crop of the carnivorous Coleoptera, and by a very remarkable valvular apparatus (gizzard) previously unknown in the Myriopods. It is a spherical or ellipsoidal enlargement, very muscular, furnished within with numerous setæ and even sometimes with spiny points, all directed towards the œsophagus.

On carefully studying the terminal intestine, we find that, as M. Gervais had already shown in some genera, the species of *Glomeris* are far from being the only Myriopods in which this portion of the alimentary canal presents convolutions. A simple curvature, or one or several loops exist in the terminal intestine of *Iulus*, *Geophilus*, *Himantarium*, and *Cryptops*.

My memoir also contains a detailed examination of the anterior

* Bats of North America, p. 4 (1864).

† Ann. & Mag. Nat. Hist. 1875, vol. xvi. p. 152.